

Please amend the claims as follows. This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claim 1 (currently mended) An apparatus for preparing a wafer, comprising:
a wafer backside plate having a top surface and a back surface, the wafer backside plate including a cylindrical edge lip that defines a central aperture;
a central shaft fitting within the central aperture and engaging the wafer backside plate, the wafer backside plate being configured to automatically slide ~~between~~ to a second position ~~due to~~ by centrifugal force when the wafer backside plate and the shaft are spinning during rotational wafer processing and a first position when the wafer backside plate and the shaft ~~have stopped~~ stop spinning once not in rotational wafer processing, the wafer backside plate sliding independent of non-rotational movement of the shaft, and wherein a gap defined between the top surface of the wafer backside plate and the wafer is less when in the second position than when in the first position.

Claim 2 (original): An apparatus of claim 1, wherein the central shaft includes a height adjustment slot that is configured to engage the wafer backside plate.

Claim 3 (original): An apparatus of claim 2, wherein the cylindrical edge lip of the wafer backside plate includes a pin that is designed to slide within the height adjustment slot.

Claim 4 (currently Amended): An apparatus of claim 3, wherein the height adjustment slot includes,
an initial position; and
a last position,

wherein the pin is movably disposed within the height adjustment slot such that the pin is configured to slide slides from the initial position in the height adjustment slot to the last position in the height adjustment slot during rotational wafer processing.

Claim 5 (currently amended): An apparatus of claim 3, wherein the height adjustment slot includes,

an initial position; and

a last position,

wherein the pin is movably disposed within the height adjustment slot such that the pin configured to slide slides from the last position in the height adjustment slot to the initial position in the height adjustment slot when completing rotational wafer processing.

Claims 6-7 (previously cancelled)

Claim 8 (currently amended): An apparatus for preparing a wafer, comprising:

a chuck having a plurality of grippers for holding the wafer;

a wafer backside plate having a top surface and a back surface, the wafer backside plate including a cylindrical edge lip that defines a central aperture, the cylindrical edge lip being defined on the back surface;

a shaft connected to a central portion of the chuck, the shaft receiving and engaging the cylindrical edge lip of the backside plate, the wafer backside plate being configured to automatically slide ~~between~~ to a second position ~~due to~~ by centrifugal force when the chuck, the wafer backside plate, and the shaft are spinning during rotational wafer processing and to a first position when the chuck, the wafer backside plate, and the shaft stop spinning upon completing rotational wafer processing, the backside plate sliding independent of non-rotational movement of the shaft, and wherein a gap defined between the top surface of the

wafer backside plate and the wafer is less when in the second position than when in the first position.

Claim 9 (original): An apparatus of claim 8, wherein the shaft includes a height adjustment slot that is configured to engage the wafer backside plate.

Claim 10 (original): An apparatus of claim 9, wherein the cylindrical edge lip of the wafer backside plate includes a pin that is designed to slide within the height adjustment slot.

Claim 11 (currently amended): An apparatus of claim 9, wherein the height adjustment slot includes,

an initial position; and

a last position,

wherein the pin is movably disposed within the height adjustment slot such that the pin is configured to slide slides from the initial position in the height adjustment slot to the last position in the height adjustment slot during rotational wafer processing.

Claim 12 (currently amended): An apparatus of claim 9, wherein the height adjustment slot includes,

an initial position; and

a last position,

wherein the pin is movably disposed within the height adjustment slot such that the pin is configured to slide slides from the last position in the height adjustment slot to the initial position in the height adjustment slot when completing rotational wafer processing.

Claim 15 (currently amended): An apparatus for spinning, rinsing and drying a wafer, comprising:

a chuck having a plurality of wafer holders for holding the wafer during the spinning, rinsing and drying;

a wafer backside plate having a disk-like top surface that mirrors the wafer being held by the holders above the wafer backside plate, the wafer backside plate including a cylindrical edge lip at a center, the edge lip having an inner surface that defines a central aperture;

a shaft connected to a central portion of the chuck, the shaft receiving and engaging the inner surface of the edge lip of the backside plate, the wafer backside plate being configured to automatically slide ~~between~~ to a second position when the chuck, the wafer backside plate, and the shaft are spinning during rotational wafer processing ~~due to~~ by centrifugal force, and to a first position when the chuck, the wafer backside plate, and the shaft ~~have stopped~~ stop spinning upon completing rotational wafer processing, ~~the backside plate sliding independent of non-rotational movement of the shaft~~, and wherein a gap defined between the top surface of the wafer backside plate and the wafer is less when in the second position than when in the first position.

Claim 16 (original): An apparatus for spinning, rinsing and drying a wafer as recited in claim 15, wherein the shaft includes a height adjustment slot that is configured to engage the wafer backside plate.

Claim 17 (original): An apparatus for spinning, rinsing and drying a wafer as recited in claim 15, wherein the cylindrical edge lip of the wafer backside plate includes a pin that is designed to slide within the height adjustment slot.

Claim 18 (currently amended): An apparatus of claim ~~16~~ 17, wherein the height adjustment slot includes,

an initial position; and

a last position,

wherein the pin is movably disposed within the height adjustment slot such that the pin configured to slide slides from the initial position in the height adjustment slot to the last position in the height adjustment slot during rotational wafer processing.

Claim 19 (currently amended): An apparatus of claim ~~16~~ 17, wherein the height adjustment slot includes,

an initial position; and

a last position,

wherein the pin is movably disposed within the height adjustment slot such that the pin configured to slide slides from the last position in the height adjustment slot to the initial position in the height adjustment slot when completing rotational wafer processing.

Claims 20-30 (previously cancelled)

Claim 31 (new): An apparatus for preparing a wafer, comprising:

a wafer backside plate having a top surface and a back surface, the wafer backside plate including a cylindrical edge lip that defines a central aperture;

a central shaft fitting within the central aperture and engaging the wafer backside plate, the wafer backside plate being configured to automatically slide to an up position by centrifugal force when the wafer backside plate and the shaft begin spinning for rotational wafer processing and to a down position when the wafer backside plate and the shaft end

rotational wafer processing, and wherein a gap defined between the top surface of the wafer backside plate and the wafer is less when in the up position than when in the down position.

Claims 32 (new): An apparatus for preparing a wafer, comprising:

a wafer backside plate having a top surface and a back surface, the wafer backside plate including a cylindrical edge lip that defines a central aperture;

a central shaft fitting within the central aperture, the shaft including a height adjustment slot that is configured to engage the wafer backside plate, the wafer backside plate being configured to automatically slide to an up position along the height adjustment slot by centrifugal force when the wafer backside plate and the shaft are spinning during rotational wafer processing and a down position along the height adjustment slot when the wafer backside plate and the shaft stop spinning, and wherein a gap defined between the top surface of the wafer backside plate and the wafer is less when in the up position than when in the down position.

Claim 33 (new): An apparatus for preparing a wafer, comprising:

a wafer backside plate having a top surface and a back surface, the wafer backside plate including a cylindrical edge lip that defines a central aperture, the cylindrical edge lip of the wafer backside plate including a pin;

a central shaft fitting within the central aperture, the shaft including a height adjustment slot that is configured to engage the pin, the pin configured to slide within the height adjustment slot, the wafer backside plate being configured to automatically slide to an up position by centrifugal force when the wafer backside plate and the shaft are spinning

Appl. No. 09/747,660

Amdt. Dated February 17, 2004

Reply to Office Action Dated November 17, 2003

during rotational wafer processing and a down position when the wafer backside plate and the shaft stop spinning, and wherein a gap defined between the top surface of the wafer backside plate and the wafer is less when in the up position than when in the down position.